

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (currently amended) An air quality system for removing a pollutant from an air stream, and for providing cleansed air to an interior air space, said air quality system comprising:

5 at least ~~one~~ three air cleaner units ~~in communication with said interior air space;~~

~~wherein said at least one air cleaner unit provides only a single flow path for said air stream;~~

wherein each of said at least ~~one~~ three air cleaner units comprises:
at least one photocatalytic oxidation unit; and

10 first and second discrete adsorbent units;

wherein said first adsorbent unit includes a first adsorbent material, the first adsorbent material having a surface area within 1001 m²/g to 1499 m²/g and having pore diameters within 6 Å to 600 Å; having a first isotherm curve for said pollutant, said first adsorbent unit being in flow communication with said
15 ~~interior air space having said pollutant,~~

wherein said second adsorbent unit includes a second adsorbent material, the second adsorbent material having a surface area within 1501 m²/g to 2500 m²/g and having pore diameters within 5 Å to 10 Å;

wherein said at least one photocatalytic oxidation unit is spaced from and
20 located downstream from said first adsorbent unit and spaced from and located
upstream from the second adsorbent unit;

wherein said first adsorbent unit is adapted to reversibly adsorb said pollutant from said air stream at a first concentration of said pollutant;

25 wherein said first adsorbent unit is further adapted to desorb said pollutant into said air stream at a second concentration of said pollutant; ~~and~~

wherein said second adsorbent unit is adapted to adsorb said pollutant from said air stream at the second concentration of the pollutant;

a mix manifold in communication with each of said at least three air cleaner units;

30 wherein two of said at least three air cleaner units are spaced from and located upstream from said mix manifold;

wherein one of said at least three air cleaner units is spaced from and located downstream from said mix manifold; and

35 wherein air from said air cleaner units located upstream from said mix manifold is mixed with air emanating from said mix manifold and passed through said air cleaner unit located downstream from said mix manifold.

2-8. (Canceled)

9. (Previously Presented) The air quality system of claim 1, wherein said at least one photocatalytic oxidation unit comprises at least one photocatalytic panel, wherein said photocatalytic panel comprises a
5 photocatalytic support, and wherein said photocatalytic panel comprises expanded aluminum.

10. (Canceled)

11. (Canceled)

12. (Original) The air quality system of claim 10, wherein:

said first adsorbent material comprises an activated carbon fabric.

13. (Original) The air quality system of claim 1, wherein said interior air space is within an aircraft.

14-16. (Canceled)

17. (Currently amended) The air quality system of claim 1, wherein each of said at least three air cleaner units further comprises ~~comprising~~ a particulate filter upstream from said at least one photocatalytic oxidation unit and said first adsorbent unit.

18. (Currently amended) The air quality system of claim 1, wherein each of said at least ~~one~~ three air cleaner ~~unit~~ units is adapted for operation at a constant temperature.

19. (Currently amended) The air quality system of claim 1, wherein each of said at least ~~one~~ three air cleaner ~~unit~~ units is adapted for operation at ambient temperature.

20-64. (Canceled)

65. (Previously Presented) The air quality system of claim 1, wherein:

said at least one photocatalytic oxidation unit comprises a plurality of photocatalytic panels and a plurality of UV sources, and

5 said plurality of photocatalytic panels and said plurality of UV sources are arranged linearly and parallel to each other, with each of said

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plurality of UV sources alternating with each of said plurality of photocatalytic panels.

66. (Canceled)